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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/081,502	02/22/2002	Kimberlee A. Kemble	BOC9-2001-0017 (261)	1503
40/087 7590 11/12/2008 AKERMAN SENTERFITT P. O. BOX 3188 WEST PALM BEACH, FL 33402-3188				
EXAMINER				
SERROU, ABDELALI				
ART UNIT		PAPER NUMBER		
2626				
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11/12/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/081,502

Applicant(s)

KEMBLE ET AL.

Examiner

Abdelali Serrou

Art Unit

2626

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 19, 20, 22-25, 27 and 28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 19, 20, 22-25, 27 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In response to the final office action mailed on 7/9/08, applicant filed an RCE on 8/20/08 canceling claims 29-30, 32-35, and 37-38. Claims 1-18, 21, 26, 31, and 36 were previously canceled. The pending claims are 19-20, 22-25, and 27-28.

Response to Arguments

2. Applicant's arguments filed 8/20/08 have been fully considered but they are not persuasive.

Applicant argues that McAllister does not teach excluding any data field having duplicate data items. Rather, in McAllister the data field having duplicate data items (such as the "name") is provided together with the data field having unique data items (such as the "address"). The examiner refers to pages 7-9, along with figures 1-2 of the specification of the current application, wherein a user initiates a search for the name "Joe Smith". Since "Joe Smith" is a duplicate name, according to the database of figure 1, the search proceeds within the database until a single record such as a location or job description is located, then the disambiguation result will be, i.e. Joe Smith, the programmer, located in Chicago. The examiner points out that this is the exact concept taught by McAllister. When McAllister's can not identify distinguish the meant "Joe Smith", the system proceeds to the address field to identify Joe Smith.

Applicant argues that McAllister does not teach excluding data items that are unpronounceable. The examiner points out to McAllister's col. 4, lines 22-23 wherein he explicitly states eliminating unlikely pronunciations. Furthermore, determining whether data is pronounceable or not, and ignoring or excluding the unpronounceable one is well known in the

art by using multiple techniques i.e. dictionary look up, and as evidenced by applicant, see specification, page 6, lines 11-15 *“The search results further can be processed to determine whether the data items within the data fields accurately can be pronounced through a speech interface. Those skilled in the art will recognize that this determination can be made using any of a variety of techniques such as using a dictionary to lookup data items or analyzing the patterns of vowels and consonants of the data items.”*

Applicant argues that Gilai does not teach excluding data fields having data items that exceed a predetermined maximum length. The examiner points out that Gilai generates a spellguess list. The selection of individual candidate strings depends on their own probability, and the said probability declines as the length of the input string increases (col. 12, lines 13-46). Therefore, when the length of the input string reaches a threshold, the input string will not be considered. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use Gilai's feature of eliminating or excluding data items that exceed a predetermined length and apply it to the disambiguation system of McAllister, in order to exclude those data field that exceed a predetermined length. Furthermore, excluding data fields having data items that exceed a predetermined maximum length is an inherent feature within the speech recognition/synthesis engine. If the length of a word exceeds the length of stored speech models within the database of a system, the system would not be able to recognize or pronounce that word, and by default, the long word will be excluded. McAllister discloses a speech recognition/synthesis engine (col. 2, lines 35-40; and col. 4, lines 61-67). Therefore, excluding data fields having data items that exceed a predetermined maximum length is inherently suggested by McAllister.

Therefore, the prior art reference McAllister and Gilai do read on the claims language. Hence, the rejection of claims Therefore, the prior art reference McAllister and Gilai do read on the claims language. Hence, the rejection of claims 19-20, 22-25, and 27-28 stands valid.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19-20, 22-25, and 27-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The steps of claims 19-20, 22-25, and 27-28 are not tied to another statutory class (such as a particular apparatus) or transforms underlying subject matter to a different state or thing.

Accordingly, the subject matter of claims 19-20, 22-25, and 27-28 is held to be nonstatutory subject matter.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19-20, 22-25, and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McAlister et al., Patent No. 6,421,672 in view of Gilai et al., U.S. Patent No. 6,256,630.

As per claims 19 and 24, McAllister et al. teach a method for disambiguating search results (see abstract) comprising:

retrieving multiple database entries (multiple listings, col. 2, line 42-51) responsive to a database search, wherein said retrieved database entries include a plurality of common data fields (primary key and secondary data fields, col. 2, lines 53 and 60; and col. 5, line 6);

processing common data fields of said retrieved database entries according to predetermined disambiguation criteria (col. 7, lines 46-63, and col. 8, lines 44-65, wherein additional processing and database are provided to resolve the ambiguity of the listings, according to predetermined disambiguation criteria, and distinguish it between other listings, when the listings disambiguation that lead to an accurate pronunciation is not configured);

excluding data fields of said retrieved database entries having duplicate data items (col. 2, lines 52-65, wherein when duplicated data field, such as a name, is excluded and other data fields such as the addresses of the listings are examined);

excluding any data fields having at least one data item that is unpronounceable (col. 4, lines 23-25, “eliminate unlikely pronunciations”);

based upon said processing, identifying from among said plurality of common data fields at least one disambiguation data field that satisfies said predetermined disambiguation criteria (col. 3, lines 34-54, wherein the system uses hierarchical search pattern to identify distinguishing information, and determines that the locations, along with the names, of the identified listings is more suitable to identify the right candidate);

selecting one disambiguation data field based on a predetermined selection criterion when more than one disambiguation data field is identified in the identifying step (col. 3, lines

34-54, wherein one disambiguation field (location) is selected when there exist another disambiguation field (phone number) in order to distinguish between different callers); and presenting, through a speech interface (speech signal) , data items corresponding to said selected disambiguation data field for each said retrieved database entry (see col. 3, lines 47-54), wherein said speech interface is used in conjunction with a system in which said database search is performed (see Fig. 1, field 34a and col. 7, lines 63-67), and wherein said speech interface provides users of said system with an interface for searching for information contained within a database in which said database search was conducted and with an interface for audibly receiving results of said database search (see col. 9, lines 37-67).

McAllister does not explicitly teach excluding data fields having data items that exceed a predetermined maximum length.

However, this feature is well known in the art as evidenced by Gilai et al. which disclose a database accessing system and method comprising the step of excluding data fields having data items that exceed a predetermined length (col. 12, lines 13-46, wherein the database accessing system of Gilai enters, onto a list, only strings with a predetermined length entered by the user, and obviously ignores the rest. Furthermore, it discards strings with lowest probability which corresponds to strings with higher length).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to use Gilai's feature and apply it to the disambiguation system of McAllister, in order to exclude data field that exceed a predetermined length. Gilai suggests that would improve the accuracy and efficiency of the retrieval process by providing the best selected candidate entries (Gilai, col. 16, pages 14-23).

As per claims 20 and 25, McAllister in view of Gilai teach all the limitations of claims 19, 24, 29, and 34, upon which claims 20, 25, 30, and 35 depend. Furthermore, McAllister teaches wherein data item pronounceability is determined using at least one of a determination technique based upon a failed dictionary lookup where the dictionary contains pronounceable data items and a determination technique that analyzes patterns of consonant-vowel combinations occurring within the data items (necessarily disclosed within McAllister's system, to synthesize speech, col. 4, line 61 – col. 5, line3).

As per claims 22 and 27, McAllister in view of Gilai disclose all the limitations of claims 19, 24, 29, and 34 upon which claims 22, 27, 32, and 37 depend. McAllister does not explicitly teach wherein the maximum length is determined from an empirical analysis of a relative ease with which users recall audibly presented speech items. Gilai in the same field of endeavor teaches wherein the maximum length is determined from an empirical analysis of a relative ease with which users recall audibly presented speech items (col. 12, lines 13-46). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the similarity method of Gilai (which meets the claimed limitation of "empirical analysis of relative ease" to improve the accuracy and efficiency of the retrieval process by providing the best selected candidate entries (Gilai, col. 16, pages 14-23).

As per claim 23, McAllister in view of Gilai disclose all the limitations of claims 19 and 29, upon which claims 23 and 33 depend. McAllister does not explicitly teach selecting the disambiguation data field having data items with a smallest average length. However, this feature is well known in the art as evidenced by Gilai's which discloses a database accessing system and method comprising the step of determining a data from said plurality of common data fields having data item with a smallest average length, (see col. 12, lines 1-12). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the determining step of Gilai et al. in the processing step of McAllister et al., because this would improve the accuracy and efficiency of the data retrieval process by providing the best selected candidate entries (Gilai, col. 16, pages 14-23).

As per claim 28, McAllister in view of Gilai teach all the limitations of claims 24, and 34, upon which claims 28 and 38 depend. Furthermore, Mc Allister teaches receiving a user input specifying a data item associated with said selected disambiguation data field to disambiguate said retrieved database entries (col. 3, lines 55-65).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdelali Serrou whose telephone number is 571-272-7638. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David R. Hudspeth can be reached on 571-272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Abdelali Serrou/
Examiner, Art Unit 2626
11/7/08

/David R Hudspeth/
Supervisory Patent Examiner, Art Unit 2626